

REMARKS

The specification has been amended as discussed below to remove reference to the deposit accession number of microorganism made to American Type Culture Collection, to remove extra spaces, and to remove hyperlinks. Claims 1-3, 6, 8 and 23-40 are pending in the present application. Claims 23, 26, 29, 32, 35 and 38 have been allowed. Claims 1-3, 6, 8, 24-25, 27-28, 30-31, 33-34, 36-37 and 39-40 have been cancelled and claims 41-46 have been added. Support for the amendments made can be found in the specification and original claims as filed. No new matter has been added by virtue of the amendments.

Applicants gratefully acknowledge that claims 23, 26, 29, 32, 35 and 38 are allowable.

Objections to the Specification

The Examiner objected to the disclosure because the ATCC deposit # was left blank in the specification and because there was a blank space at the bottom of page 36.

The Specification has been amended to address the objections. It is believed the amendments contained herein render the present objection moot. Reconsideration and withdrawal of the objections is respectfully requested.

The Examiner also objected to the specification because on Form 1449 received on September 25, 2002, references 7-9 were missing publication dates and reference 11 was missing authorship information.

Applicants respectfully traverse the objection to the citations. Applicants submit herewith a supplemental form PTO/SB/08B that lists the publication date for the EMBL and WPI database records listed in references 7-9 and lists the authorship of the publication listed in reference 11. This supplemental submission merely corrects the citations to reflect proper reference to dates of the EMBL and WPI database references and the author of the publication. It is believed the citations are complete as presently filed. Consideration of these cited references is respectfully requested.

Claim Objections

Claim 1 was objected to for lacking an "or" between "SEQ ID NO:1" and "SEQ ID NO:3" in claim 1(a), 1(b) and 1(f). Claim 27 was objected to for not having a period at the end.

Applicants have cancelled claims 1 and 27 rendering the objection moot. Reconsideration and withdrawal of the objections is respectfully requested.

Claim Rejections under 35 U.S.C. §112, Second Paragraph

Claims 1-3, 6 and 8 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner cites: (1) the failure to recite ATCC deposit information in claim 1(d); (2) claims 1 and 6 are indefinite in reciting "a nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:2"; and (3) claims 1, 6 and 8 are indefinite in the recitation of "hybridizes...under stringent conditions" and "hybridizes." Claims 2 and 3 were rejected as being dependent from claim 1.

Applicants respectfully traverse the rejection. Applicants submit that the recitation of the phrase "a nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:2" as used in claims 1 and 6 is not indefinite according to MPEP 2111.03, "'Comprising' is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim." The naturally occurring variant must include at least the amino acid sequence of SEQ ID NO:2.

Applicants also submit that the terms "hybridizes under stringent conditions" and "hybridizes" as used in the claims would be well understood in view of the knowledge of one of skill in the art, combined with the teachings of the specification. However, in the interest of expediting prosecution, and without acquiescing to the Examiner's rejection, Applicants have presently cancelled claims 1-3, 6 and 8 rendering the rejection moot. Reconsideration and withdrawal of the rejection under 35 U.S.C. §112, Second Paragraph, is thus respectfully requested.

Claim Rejections under 35 U.S.C. §112, First Paragraph

Claims 1, 3, 6 and 8 were rejected under 35 U.S.C. 112, first paragraph, because the "specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. Specifically, the Examiner states the specification is not enabling "for any nucleic acid molecule with 80% homology to SEQ ID NO:1 or 3, any fragment of SEQ ID NO:1 or 3, nucleic acids encoding any fragment of SEQ ID NO:2, or any nucleic acid that hybridizes to SEQ ID NO:1 or 3" as recited in claim 1. In addition, claim 1(d) has a blank ATCC accession number. Claims 3, 6 and 8 are rejected as they depend from claim 1.

Applicants respectfully traverse this rejection, however, in the interest of expediting prosecution, and without acquiescing to the Examiner's rejection, the Applicants have canceled claims 1, 3, 6 and 8, rendering the rejection moot. Reconsideration and withdrawal of the rejection under 35 U.S.C. §112, First Paragraph, is thus respectfully requested.

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Claims 1, 3, 6 and 8 were rejected under 35 U.S.C. 112, first paragraph, as “containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the Examiner states that the “specification does not contain any disclosure of the function of all DNA sequences” in the genus of DNA molecules of the claims.

Applicants respectfully traverse this rejection, however, in the interest of expediting prosecution, and without acquiescing to the Examiner's rejection, the Applicants have canceled claims 1, 3, 6 and 8, rendering the rejection moot. Reconsideration and withdrawal of the rejection under 35 U.S.C. §112, First Paragraph, is thus respectfully requested.

Claim Rejections under 35 U.S.C. §102

Claims 1, 3, 6, 8, 24, 25, 27, 28, 30, 31, 33, 34, 36, 37, 39 and 40 were rejected under 35 U.S.C. 102(e) as being anticipated by Tang et al, 2003 (US20030104529; filing date January 21, 2000) or Drmanac et al./Hyseq, Inc., 2003 (US20030073623; filing date January 20, 1999). The Examiner states that Tang et al. teach a polynucleotide that “(i) comprises 968 nucleotides of SEQ ID NO:1, (ii) comprises 834 nucleotides of SEQ ID NO:3, (iii) has 100% identity with SEQ ID NO:3, and (iv) encodes a peptide having 100% identity with SEQ ID NO:2.” The Examiner also states that Drmanac et al, teach a polynucleotide that “(i) comprises 403 nucleotides of SEQ ID NO:1, (ii) comprises 403 nucleotides of SEQ ID NO:3, and (iii) encodes a peptide having comprising [sic] 134 amino acid residues of SEQ ID NO:2.” The Examiner further states the Tang et al. and Drmanac et al. teach their respective polynucleotides “in a vector, wherein the vector is contained in a host cell, including mammalian host cells...and their polypeptide as a fusion protein.” The Examiner finally states that the polynucleotides of Tang et al and Drmanac et al would “hybridize to the complement of SEQ ID NO:1 and SEQ ID NO:3.”

Applicants respectfully traverse the rejection, however, in the interest of expediting prosecution, and without acquiescing to the Examiner's rejection, Applicants have canceled claims 1, 3, 6, 8, 24, 25, 27, 28, 30, 31, 33, 34, 36, 37, 39 and 40, rendering the rejection moot. Reconsideration and withdrawal of the rejection under 35 U.S.C. §102(e) is thus respectfully requested.

Claims 1, 3, 6, 8, 24, 25, 27, 28, 30, 31, 33 and 34 were rejected under 35 U.S.C. 102(e) as being anticipated by Ho et al, 2003 (US6579708; filing date March 27, 2000). The Examiner states that Ho et al. teach a polynucleotide that “(i) comprises 556 nucleotides of SEQ ID NO:1, (ii) comprises 556 nucleotides of SEQ ID NO:3, (iii) has 99.8% identity with SEQ ID NO:3, and (iv) encodes a peptide having 100% identity with SEQ ID NO:2.” The Examiner further states the Ho et al. teach their polynucleotide “in a vector, wherein the vector is contained in a host cell and their polypeptide as a fusion

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protein that has uridine kinase activity." The Examiner finally states that the polynucleotide of Ho et al would "hybridize to the complement of SEQ ID NO:1 and SEQ ID NO:3."

Applicants respectfully traverse the rejection, however, in the interest of expediting prosecution, and without acquiescing to the Examiner's rejection, Applicants have canceled claims 1, 3, 6, 8, 24, 25, 27, 28, 30, 31, 33, 34, rendering the rejection moot. Reconsideration and withdrawal of the rejection under 35 U.S.C. §102(e) is thus respectfully requested.

Claim Rejections under 35 U.S.C. §103

Claims 36, 37, 39 and 40 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al., 2003 in view of Ausubel, 1987. Specifically the Examiner states "Ho et al do not teach their vector in mammalian host cells. However, using mammalian host cells as hosts for recombinant polynucleotides is common in the art (Ausubel, 1987). It would have been obvious to a person of ordinary skill in the art to use the methods of Ausubel et al to use mammalian cells as host cells for the polynucleotides of Ho et al."

Applicants respectfully traverse the rejection, however, in the interest of expediting prosecution, and without acquiescing to the Examiner's rejection, Applicants have canceled claims 36, 37, 39 and 40, rendering the rejection moot. Reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) is thus respectfully requested.

CONCLUSIONS

In view of the amendments and remarks herein, Applicants respectfully submit that the objections and rejections presented by the Examiner are now overcome and that this application is in condition for allowance. If in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned.

This paper is being filed timely as a request for a one-month extension of time is filed concurrently herewith. No additional extensions of time are required. In the event any additional extensions of time are necessary, the undersigned hereby authorizes the requisite fees to be charged to Deposit Account No. 501668.

Entry of the remarks made herein is respectfully requested.

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Respectfully submitted,

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